Tree-Of-Heaven

Ailanthus altissima (Mill.) Swingle

DESCRIPTION: Tree-of-heaven, also known as ailanthus, Chinese sumac, and stinking sumac, is a rapidly growing, deciduous tree in the mostly tropical quassia family (Simaroubaceae). Mature trees can reach 80 feet or more in height. It has smooth stems with pale gray bark, twigs which are light chestnut brown and large compound leaves. All parts of the tree, especially the flowers, have a strong, offensive odor, which some have likened to peanuts or cashews.

ECOLOGICAL THREAT: Tree-of-heaven is a prolific seed producer, grows rapidly, and can overrun native vegetation. Once established, it can quickly take over a site and form an impenetrable thicket. Ailanthus trees produce toxins that prevent the establishment of other plant species.

DISTRIBUTION IN THE UNITED STATES: Tree-of-heaven is widely distributed across the United States, occurring in forty-two states, from Maine to Florida and west to California.

HABITAT IN THE UNITED STATES: Fields, roadsides, fencerows, woodland edges and forest openings.

CURRENT MANAGEMENT APPROACHES:

- Young seedlings may be pulled or dug up, preferably when soil is moist. Care must be taken to remove the entire plant including all roots and fragments. Cutting large seed producing female trees would at least temporarily reduce spread by this method.
- The most effective method of ailanthus control seems to be through the use of herbicides, which may be applied as a foliar (to the leaves), basal bark, cut stump, or hack and squirt treatment.
- Basal bark application is one of the easiest methods and does not require any cutting. It works best during late winter/early spring and in summer.
- The hack-and-squirt or injection method is very effective and minimizes sprouting and suckering when applied during the summer.
- The cut stump method is useful in areas where the trees need to be removed from the site and will be cut as part of the process.
- A potential biological control for ailanthus may lie in several fungal pathogens, (*Verticillium dahliae* and *Fusarium oxysporum*) that have been isolated from dead and dying ailanthus trees in New York and in southern and western Virginia.

References: http://www.nps.gov/plants/alien/fact/aial1.htm
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